

## **Poster Symposium Early Head Start Risk**

**Co-Chairs:** Jini E. Puma, Judith J. Carta

**Discussants:** Hiram E. Fitzgerald, Catherine Ayoub, Richard A. Faldowski

**Presenters:** Jini Elizabeth Puma, Whitney Ann LeBoeuf, Ana Maria Pinter, Richard A. Faldowski, Gui-Young Hong, Sandra McClowry, Helen H. Raikes, Ellen E. Kisker, Eileen Rodriguez, James Selig, Mark Spellman, Carol L. McAllister, Tammy Thomas

**Carta:** This poster symposium explored the concept of cumulative risk, furthering our knowledge about the causal relations between risk and child development. Each poster used the National Early Head Start (EHS) Research and Evaluation Study dataset; therefore, they concentrate on cumulative risk in the early years of life.

- **Optimizing the Power of Prediction: Second Generation of Research on Cumulative Risk and Early Childhood Outcomes**

Whitney A. LeBoeuf, Jini E. Puma, Judith J. Carta, Mark E. Spellman, Eileen T. Rodriguez, Norman F. Watt, James P. Selig

The first goal of this study was to examine which risk variables have been employed in creating cumulative risk indices (CRIs) when predicting particular early childhood outcomes. Overall, maternal well-being risk variables were the most prominently used. Additionally, more maternal risks were used when predicting behavioral child outcomes than when predicting both cognitive and language outcomes. Family resource risk variables were included more often when measuring cognitive child outcomes. The second aim of this study was to explore the predictive ability of various CRIs on cognitive, language, and behavioral outcomes at 3 years of age. Overall, a CRI appears to be most predictive of cognitive, followed by language and behavioral outcomes.

- **Are Risk Factors and Protective Factors Two Sides of the Same Coin?**

Ana Maria Pinter, Mark E. Spellman, Eileen T. Rodríguez

This study sought to understand whether the risk and protective factors affecting children's cognitive and social-emotional development were opposite ends of a single continuum, or whether they were distinct, independent constructs. The distributions of each of the 68 variables comprising the Cumulative Risk Index were split into tertiles representing low, moderate, and high risk.

For children's cognitive development, one third of the variables tested operated either as a risk or a protective factor. Similarly, for children's social-emotional development, over half of the significantly predictive variables operated either as a risk or a protective factor. In addition, some factors were found to relate only to one of the two child developmental domains examined.

- **Methodological and Statistical Issues in Evaluating the Effects of Risk and Protective Factors on Child Development**

Richard A. Faldowski, Gui-Young Hong

Based on recent methodological innovations, this presentation proposed a unifying taxonomy and statistical strategies to understand relationships among risk and protective factors and child outcomes. Following Kraemer and colleagues (1997, 1999, 2001, 2002, 2003), this framework provided a common methodology for understanding relationships among statistical risk factors and between statistical risk factors and outcomes. Five classes of relationships among statistical risk factors were identified: (a) proxy relationships, (b) overlapping risk factors, (c) independent risk factors, (d) moderation, and (e) mediation.

**References**

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- **Cumulative Risk as a Moderator of Temperament's Relationship With Cognitive and Language Development in Low-Income Families**

Mark E. Spellman, Sandee G. McClowry, Eileen T. Rodriguez, Ana Maria Pinter

A total of 68 child and family factors deemed to be part of the overall family risk constellation were categorized into one of nine dimensions of risk, and an aggregate across the nine dimensions of risk was obtained and converted into tertile scores reflecting relatively low, moderate, and high cumulative risk. Findings reveal that the effects of challenging temperament differ dramatically on children's language and cognitive outcomes depending on their cumulative risk status.

- **Children and Families at Highest Risk in Early Head Start: Program Impacts at Age 3, Early Childhood Experiences from 3-5, and Outcomes at Age 5**

Helen H. Raikes, Ellen E. Kisker, Rachel Chazan Cohen, Judith Carta, Jini E. Puma, Whitney A. LeBoeuf, Catherine Ayoub

At the end of the EHS program when children were age 3, despite a pattern of positive impacts for children and families in the low and medium risk groups, there were no positive impacts for the high-risk group. Subsequent analyses illustrated that EHS parents at highest risk were difficult to engage and participated less consistently in services than other parents.

Analyses conducted when children were 5 suggest program sleeper effects. At age 5, EHS children in the highest risk group had better approaches to learning as reported by their parents, although there was a negative impact on letter-word identification. Parents were observed to provide more support and stimulation than control group parents. EHS children and parents were less likely to be living in environments where they witnessed violence and to be living with someone with an alcohol or drug problem than control group children. Parents were less likely to report having been physically, emotionally, or sexually abused in the past year.

- **Challenging the “One Size Fits All” Approach to Early Development: Predictive Models of Children’s Cognitive and Language Development by Cumulative Risk Status in Low-Income Families**

Eileen T. Rodriguez, Kathy Thornburg, Mark E. Spellman, Wayne Mayfield

Construction of cumulative risk status was undertaken following the approach of other cumulative risk researchers (e.g., Brooks-Gunn, Klebanov, Liaw, & Duncan, 1995; Burchinal, Roberts, Hooper, & Zeisel, 2000; Evans, 2003; Sameroff & Seifer, 1995). A total of 68 child and family factors were categorized into one of nine dimensions: (a) child cognitive development, (b) child attention regulation, (c) child social-emotional development, (d) child health, (e) maternal health and well-being, (f) parenting, (g) family structure, (h) family resources, and (i) family and community context. Findings suggest attention regulation was crucial for children’s later success in moderate risk conditions. Maternal well-being showed its strongest effects in the moderate risk group. Level of family resources became increasingly important for children’s cognitive development as poverty became more severe.

### **References**

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mental health. In H. Fitzgerald, B. Lester, and B. Zuckerman (Eds.), *Children of poverty: Research, health, and policy issues*. Reference books on family issues, Vol. 23 (pp. 233-258). New York, NY: Garland Publishing, Inc.

- **Low-Income Families' Changing Pattern of Risks Over Time as Predictors of Children's Outcomes in Preschool**

James P. Selig, Judith J. Carta, Carla Peterson, Jane Atwater, Gayle Luze, Todd D. Little

The purpose of this study was to use an index of nine contextual risk variables to track change in risk status over time and determine whether there are multiple patterns of changing risk. Preliminary analyses from the National EHS Research and Evaluation Study show a general decline in risk across time such that on average families experienced 2.08 risks (SD=1.46) at time one, 1.89 risks (SD=1.41) at time two, and 1.76 risks (SD=1.47) at time three.

- **Was Sameroff Right: Is Cumulative Risk Status Stable Over Time?**

Mark E. Spellman, Eileen T. Rodriguez, Ana Maria Pinter

Based on Sameroff and Seifer's (1995) hypothesis that the stability of cumulative risk over time might drive the stability of children's cognitive functioning, the National EHS Research and Evaluation Study provided an opportunity to validate these findings on a large, nationally representative sample of low-income families. Crosstab analyses of overall risk status (i.e., low, moderate, high) across two time points revealed modest stability in risk status over time. Approximately half (52%) of the families showed no change in cumulative risk status over time. Within families showing change in risk status over time, a roughly equal proportion increased in risk status as did decrease on Maternal Well-Being, Family Resources, Family Structure, and Parenting. For Child Attention Regulation and Family and Community Context, a larger percentage of families showed negative change in cumulative risk status over time. Conversely, a majority of families showed positive change in cumulative risk status over time on Child Cognitive, Social-Emotional, and Health and Well-Being.

### **Reference**

Sameroff, A. J., & Seifer, R. (1995). Accumulation of environmental risk and child mental health. In H. Fitzgerald, B. Lester, & B. Zuckerman (Eds.), *Children of poverty: Research, health, and policy issues*. Reference books on family issues, Vol. 23 (pp. 233-258). New York, NY: Garland Publishing, Inc.

- **Perspectives of Early Head Start Parents on Community-Based Risks to Child Development and School Readiness**

Carol L. McAllister, Tammy Thomas, Beth L. Green, Patrick C. Wilson

This poster explored how EHS parents perceive and experience community-based risks. Based on qualitative interviews, ethnographic observations, and interpretive analysis, the authors posited low-income and minority families experience several forms of

dislocation—physical displacement, violence, isolation, economic insecurity, and discontinuous caregiving—as part of their daily experiences in community environments and that these dislocations represent cumulative and interacting risks for child development and school readiness. The dislocations explored include: (a) physical displacement; (b) community violence; (c) social isolation; (d) economic insecurity; and (e) “dislocation of care.” The narratives and experiences of EHS study parents suggest reduction of such risks will require broad changes in public policies.

**Reference**

Randolf, S. M, Koblinsky, S. A., & Roberts, D. D. (1996). Studying the role of family and school in the development of African American preschoolers in violent neighborhoods. *The Journal of Negro Education*, 65(3): 282-294.

**Fitzgerald:** Recently, models to assess risk and resilience were developed to identify both individual characteristics and aspects of the rearing environment that relate to positive outcomes. This approach led to the characterization of four types of children: (a) Resilient; (b) Non-challenged; (c) Vulnerable; and (d) Troubled. The results that were provided supported three hypothesized developmental pathways. This approach may be improved by adding a “moderate” risk category.

**Reference**

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